

Amendments to the Claims:

Please cancel claims 1-25 without prejudice to continued prosecution. Please add new claims 26-59. The claims and their status are shown below.

1-25. (Canceled)

26. (New) A wound covering, wherein said wound covering comprises a first layer and a second layer,

wherein said first layer comprises an absorbent matrix having a surface and an anti-microbiially active substance, wherein said anti-microbiially active substance is chemically or physically bonded to said surface, wherein the anti-microbiially active substance is a metal or a metal compound, wherein said surface further comprises a hydrophilic polymer,

wherein said second layer comprises a gas-permeable, liquid-impermeable film and a self-adhesive first area, wherein said second layer further comprises a second area, wherein said first area surrounds said second area,

wherein said matrix is connected to said film in said second area, wherein said wound covering adheres to human or animal skin by means of said self-adhesive first area, wherein said adherence forms a liquid-tight inner space into which a liquid can be deposited.

27. (New) The wound covering as claimed in claim 26, wherein said matrix has at least one fiber or is formed from at least one fiber and wherein the anti-microbiially active substance is bound to a surface of said fiber.

28. (New) The wound covering as claimed in claim 27, wherein said anti-microbiially active substance is bound exclusively to the surface of said matrix or said fiber.

29. (New) The wound covering as claimed in claim 26, wherein the anti-microbiially active substance is selected from the group consisting of silver, copper, zinc, a mixture of silver, copper and zinc, and a mixture or alloy comprising at least one of these components.

30. (New) The wound covering as claimed in claim 26, wherein said metal or metal compound is present in the form of clusters.

31. (New) The wound covering as claimed in claim 30, wherein said clusters of said metal or metal compound is applied to said matrix surface by evaporation and deposition, by a sputtering process, or by chemical vapor deposition.

32. (New) The wound covering as claimed in claim 26, wherein the anti-microbially active substance has a mean particle size of 5 to 100 nm.

33. (New) The wound covering as claimed in claim 26, wherein the anti-microbially active substance is present in a layer having a mean thickness of 5 to 100 nm.

34. (New) The wound covering as claimed in claim 26, wherein the anti-microbially active substance is present in an amount which is anti-microbially active upon thorough soaking of the matrix with a liquid in the matrix.

35. (New) The wound covering as claimed in claim 26, wherein the hydrophilic polymer is a polymer that decreases the adhesion of bacteria to said matrix.

36. (New) The wound covering as claimed in claim 35, wherein the bacteria is a gram-negative bacteria.

37. (New) The wound covering as claimed in claim 36, wherein the bacteria is *Staphylococcus epidermidis*.

38. (New) The wound covering as claimed in claim 26, wherein said surface of said matrix is coated with said hydrophilic polymer by means of plasma polymerization.

39. (New) The wound covering as claimed in claim 38, wherein the hydrophilic polymer is oxidized after plasma polymerization.

40. (New) The wound covering as claimed in claim 26, wherein said hydrophilic polymer is formed from monomers based on acrylic acid or from monomers based on siloxane.

41. (New) The wound covering as claimed in claim 40, wherein said siloxane is hexamethyldisiloxane.

42. (New) The wound covering as claimed in claim 26, wherein the hydrophilic polymer is present in a layer having a mean thickness of 5 to 500 nm.

43. (New) The wound covering as claimed in claim 26, wherein the anti-microbially active substance is present in an amount in which an amount of active compounds not acting cytotoxically on a wound is formed and/or released by said substance.

44. (New) The wound covering as claimed in claim 26, wherein said matrix further comprises one or more substances that assist wound healing.

45. (New) The wound covering as claimed in claim 44, wherein said one or more substances that assist wound healing are growth factors.

46. (New) The wound covering as claimed in claim 26, wherein said matrix is thoroughly soaked or impregnated with a liquid that assists in wound healing.
47. (New) The wound covering as claimed in claim 46, wherein said liquid is an acidic liquid or a liquid comprising nutrients.
48. (New) The wound covering as claimed in claim 26, wherein said film is transparent.
49. (New) The wound covering as claimed in claim 26, wherein said wound covering is transparent to light.
50. (New) The wound covering as claimed in claim 49, wherein said light is UV light, IR light, or NIR light.
51. (New) The wound covering as claimed in claim 26, wherein said wound covering further comprises an indicator.
52. (New) The wound covering as claimed in claim 51, wherein said indicator is a pH indicator.
53. (New) The wound covering as claimed in claim 51, wherein the indicator is a sensor.
54. (New) The wound covering as claimed in claim 53, wherein said sensor is a biosensor.
55. (New) The wound covering as claimed in claim 54, wherein the sensor is a conductive polymer which changes its conductivity depending on the state of the wound or wound covering.
56. (New) The wound covering as claimed in claim 51, wherein said indicator indicates the liquid content of said matrix.
57. (New) The wound covering as claimed in claim 51, wherein the indicator indicates the degree and/or type of a microbial contamination of said matrix or of a wound.
58. (New) The wound covering as claimed in claim 51, wherein the indicator indicates an inflammatory status of a wound.
59. (New) A process for the production of the wound covering as claimed in claim 26, comprising the following steps:
  - providing an absorbent matrix,
  - providing a gas-permeable but liquid-impermeable film,
  - applying a self-adhesive first area on or to said film,

Applicant : Thorsten Bechert et al.  
Serial No. : To Be Assigned  
Filed : Herewith  
Page : 6 of 9

Attorney's Docket No.: 21270-002US1

connecting said absorbent matrix to said film in a second area of said film,  
wherein the first area surrounds the second area,  
depositing an anti-microbially active substance onto said matrix, wherein said  
depositing is by a sputtering process or by chemical vapor deposition, and  
depositing a hydrophilic polymer onto said matrix, wherein said depositing is by  
plasma polymerization.